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PEOPLE'S REPUBLIC OF CHINA SCIENTIFIC ABSTRACTS

No. 170

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SCIENTIA GEOLOGICA SINICA

AUTHOR: TENG Ch'i-tung [6772 6386 2639]
WANG T'ing-mei [3769 2185 2734]
LI Chien-kuo [2621 1696 0948]
HSIANG Hung-fa [0686 1347 7569]
CH'ENG Shao-p'ing [4453 4801 1627]

ORG: None

TITLE: "A Discussion on Source Model of Haich'eng Earthquake"*

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3,
Jul 76 pp 195-204

TEXT OF ENGLISH ABSTRACT: A synthesis of various materials concerned indicates that the stress field of Haich'eng earthquake source has a principal compressive stress axis in azimuth N65°-E75°. One set of shear planes in azimuth N65°-70°W is tenso-torsional and sinistrally arranged, another set in N20°E is compresso-torsional and dextrally arranged. This stress field is coincident with the regional tectonic stress field of North China since Tertiary.

It is argued here that under the control of the regional tectonic stress field, in the tectonically "confluent" region, at which the two structural trends

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 195-204]

(NNE and NW) meet with but not cross each other, as well as at the highest point of the upwarped upper mantle, the increase in the shear stress along the NWW trending structure probably results in rupture of the top of the lower resistant layer and the overlying part of the Earth's crust, leading to the occurrence of the Haich'eng earthquake. Therefore, the seismogenic structure controlling the occurrence of this earthquake may be a NWW trending new fault with its horizontal displacement greater than that of the vertical. The fracture developed principally along a NW direction and terminated and controlled by the Niuchu-Yuyenkou deep fault of Lower Liaoho River.

Six stages of the process of development and occurrence of the Haich'eng earthquake and characteristics of various precursory anomalies throughout the whole process are described. The mechanism of principal physico-chemical changes in this process has been discussed. It suggests that the effect of stress in the deep crust, the occurrence of fractures and dislocation, the heat generation, water flow and vaporization are the principal factors causing various seismic phenomena.

*Also taking part in the discussion and the planning of the present article was comrade LIU Kuo-tung [0491 0948 2767].

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 195-204]

Finally, the stress fields of the earthquake source, tectonic model of seismogenic structures and the process of development and occurrence of the Haich'eng earthquake are diagrammatically illustrated.

AUTHOR: WANG T'ing-mei [3769 2185 2734]
HSIANG Hung-fa [0686 1347 7569]
FANG Chung-ching [2455 0112 2529]
TENG Ch'i-tung [6772 6386 2639]
CHI Feng-chu [6060 7364 2904]
CH'ENG Shao-p'ing [4453 4801 1627]
HSU Hao-min [1776 1170 3046]

ORG: None

TITLE: "A Study of the Geotectonic Background and Seismogenic Structures of Haich'eng Earthquake"*

SOURCE: Peking TI-CHIH H'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 205-212

TEXT OF ENGLISH ABSTRACT: Based upon macroscopic field investigations directed toward more thorough seismic observations in the earthquake district and its neighboring areas, a more comprehensive description of the geotectonic background is given and two points conclusion is drawn: 1) The Haich'eng earthquake occurred either on the end-points of three sets of structures tending

* Also participating in the work from time to time were comrades HSIA Huai-k'uan [1115 2037 1401], LI Chia-lin [2621 0502 2651], LI Ju-ch'eng [2621 1172 2052], and YANG Chu-en [2799 0031 1869].

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 205-212]

NNE, NW and EW respectively confluencing but not crossing or in the interlocking part controlled by the deep fault with NNE strike; meanwhile it was located in the upwarped portion of the upper mantle; 2) By the late neotectonic stage, the NW trending structure became apparently strengthened, so that a most recent tectonically active belt stretching over the entire seismic district was formed.

By analyzing the data from recent activities of ground fractures, ground failure after shock, deformation and earthquake sequence, the study of the seismogenetic structure is made, which indicates that the earthquake with a magnitude of 7.3 was caused by the influence of regional compressive stress directed NEE on the seismic region and thus, bringing about the collapse displacement of the deeply buried structure with NW strike in the interlocking portion mentioned above. It is just this buried structure that directly induced the Haich'eng earthquake, i.e. the seismogenetic structure and that it is probably a recently developing fault. The fracturing developed from SE to NW and finally ended at the Niuchu-Yuyenkou deep fault.

AUTHOR: None

ORG: Group of Experimental Seismology, Institute of Geology, Academia Sinica

TITLE: "The Precursory Phenomena and the Spacial Distribution of Fractures and Earthquake Prediction"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 213-221

TEXT OF ENGLISH ABSTRACT: By the fracturing model tests of various materials, the zonation of fractures appearing in the samples and the characteristic curve of strain occurring before the principal fracture are discussed in this paper. In addition, the precursors of earthquakes are also studied here.

AUTHOR: CH'ANG Shan [1603 1472]
K'O Ti [2688 0966]

ORG: None

TITLE: "Application of Quadratic Discriminant Function to Interpret Oil and Water Beds"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 222-226

TEXT OF ENGLISH ABSTRACT: The use of computers to automatically interpret oil and water beds is of significance. The quadratic discriminant function in multivariate statistics used to interpret oil and water beds is discussed in this paper. This approach is proven to be effective in practical work.

AUTHOR: None

ORG: X-Ray Laboratory, Wuhan Geologic College Laboratory of Mineralogy and Petrology, Kueilin Institute of Metallurgy and Geology; X-Ray Group of the Hupeh Institute of Geology

TITLE: "The Crystal Structure of Paracostibite"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 227-234

TEXT OF ENGLISH ABSTRACT: The X-ray single crystal diffraction of paracostibite (a polymorphic species of costibite) from a certain locality in Kuangtung province has been studied. The mineral belongs to the orthorhombic system, with $a = 5.81 \text{ \AA}$; $b = 5.96 \text{ \AA}$; $c = 11.71 \text{ \AA}$ and space group Pbca. Its molecular formula has been found to be $\text{Co}_{1.00}\text{Sb}_{0.94}\text{S}_{1.00}$, $z = 8$.

The crystal structure was obtained by using Patterson function analysis and electron density distribution function. The atomic coordinates were revised by the methods of the least square and optimization and then the R factors were decreased to $R(hk0) = 12.52\%$; $R(h01) = 16.94\%$ respectively. The atomic coordinate parameters were measured to be

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 227-234]

Co: $x = 0.014$, $y = 0.173$, $z = 0.386$;
Sb: $x = 0.118$, $y = 0.050$, $z = 0.180$;
S: $x = 0.366$, $y = 0.302$, $z = 0.436$.

The basic structural unit is a double octahedron consisting of two Co-Sb, S octahedrons having a common edge S-S. The double octahedrons are connected by vertices. Sb and S are linked to SbS_3^- pairs by covalent bond, the length of which is 2.482\AA .

Through the crystal analysis, it is clear that paracostibite and parammelsbergite are of the same structure. Both of them belong to the transitional structures between pyrite and marcasite.

The explanation of the crystal structure of paracostibite is important to the crystal chemical classifications of disulfides and stibno-sulfides as well as to the research of polymorphism of costibite.

AUTHOR: HSU Han-k'uei [6079 3352 1145]

ORG: Nanking Institute of Geology and Paleontology, Academia Sinica

TITLE: "New Recognition of the Lunshan Limestone in the Nanking Hills, Southern Kiangsu"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 235-245

TEXT OF ENGLISH ABSTRACT: The "Lunshan Limestone," typically located at Lunshan in Chujung county, Kiangsu province, was subdivided in 1935 by Li Chieh et al. into two parts. Its upper part containing Vaginoceras cephalopod was termed the T'angshan Limestone, belonging to Middle Ordovician; while its lower part yielding Cameroceras cephalopod was denominated as the Lunshan Limestone, belonging to Lower Ordovician.

In 1959, Yu Chien-hua, et al. of Nanking University found Middle Cambrian Probowmania (Mufushania) and Lower Cambrian Redlichia from the Lunshan Limestone in the Mufushan, near Nanking. Accordingly, they created two formation names: the P'aot'aishan Formation and the Mufushan Formation, belonging respectively to Middle Cambrian and Lower Cambrian.

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 235-245]

The present writer, when carrying out researches in the Lunshan Limestone at the Nanking Hills in 1964 and 1974, drew a conclusion that the Lunshan Limestone may be divided into the following six parts:

Superformation: "The T'angshan Formation" (Llanvirnian-Lower Caradocian)

Conformity

6. The Ta Wan Formation (Upper Arenigian): about 20 m.
5. The Hunghuayuan Formation (Lowr Arenigian): 80 m.
4. The Lunshan Formation (Tremadocian): 120 m.
3. The Loushankuan Formation (Upper Cambrian): 283 m.
2. The P'aot'aishan Formation (Middle Cambrian): 130 m.
1. The Mufushan Formation (Lower Cambrian): 180 m.

Conformity

Subformation: The Tengying Formation (Sinian System)

The Cambro-Ordovician deposits in southern Kiangsu nearly correspond with those in Hupeh and northern Kueichow, both belonging to the Yangtze province.

AUTHOR: CH'IAO Hsiu-fu [0829 4423 1133]

ORG: Wuhan Geologic College

TITLE: "Investigation on Stratigraphy of the Ch'ingpaik'ou Group of the Yenshan Mountains, North China"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 246-265

TEXT OF ENGLISH ABSTRACT: The Ch'ingpaik'ou group of the Yenshan Mountains may be divided into three formations, Hsiamaling, Lungshan and Chingerhyu, in ascending order.

The Hsiamaling formation rests on the underlying T'iehling formation with a remarkable, though low-angle, unconformity. The basal part of the Hsiamaling formation displays a clear section of typical residual deposits of a lateritic type. For this widespread epeirogenic uplifting at the end of the deposition of the Chihhsien group and the consequent continental erosional gap thereon, the name "Ch'inyu movement" is here proposed.

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 246-265]

The Ch'ingpaik'ou group, which lies between the unconformity marking the Ch'inyu movement below and that reflecting the Chihhsien movement above, is an entity representing a complete sequence of marine transgression. The foundation of the Ch'ingpaik'ou sedimentary basin is composed of geological formations of different ages. In its central part is distributed the T'iehling formation, while near both the eastern and the western ends of the basin occurs the still lower Wumishan formation. Further outwards, along the margin of the basin, are old crystalline rocks. Resulting from such a framework of the foundation, the Lungshan formation, which occupies a higher position in the Ch'ingpaik'ou group, usually overlaps either the old karst topography of the Wumishan formation or the erosional surface formed on more ancient crystalline rocks. It is therefore evident that the Ch'inyu movement tectonically demarcated two marine transgression cycles of deposition belonging to different ages.

Evidences in various lines--stratigraphical, sedimentational, epeirogenic and paleontological--all indicate that the Ch'ingpaik'ou group is chronologically equivalent to the Lower Sinian of South China, which comprises the strata above the unconformity connected with the Chinning movement and below the unconformity caused by the Ch'engchiang movement. These two sequences form the genuine platform blanket of East China.

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 246-265]

The "Sinian" of Chihhsien, the type section of the "Sinian" of North China, consists of three groups, in ascending order: the Ch'angch'eng, the Chihhsien and the Ch'ingpaik'ou. They represent several independent stratigraphical sequences, among which the Ch'ingpaik'ou group is an outstanding one, distinct from the others.

Further investigation of this remarkably well-developed section would make it possible to establish more than one chronostratigraphic unit of the system rank in the Late Proterozoic time scale.

AUTHOR: FENG Wen-k'o [7458 2429 4430]

ORG: None

TITLE: "Geomorphotectonic Features of the Tapieshan Area, China"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 266-276

TEXT OF ENGLISH ABSTRACT: Some geomorphotectonic types observed in eastern Tapieshan area and its neighborhood are described in this paper. They include trellis drainage pattern, graben valley, faulted block mountain, dislocation basin, valley kink point, and incised meander, as well as faulted triangular facets and trapezoidal facets, etc. The development of multiple beveling planes occurring in the area under investigation may be subdivided into three different stages, i.e. Tapiesh stage (Late Jurassic), Huoshan stage (Early Tertiary) and Huainan stage (Pliocene-Pleistocene). Some major geomorphotectonic types related to recent seismic activities and their evolution are preliminarily discussed here.

It is revealed that the different geomorphotectonic types and their developmental history are controlled by some faulted zones with various trends and different degree of activity. Consequently, the existence of multiple beveling planes as well as the appearance of recent seismic activities and neotectonic faulting are closely associated with the revival of old faults.

AUTHOR: T' IEN Tai-yi [3944 0108 3085]
FU Chun-liang [0265 2689 0081]
CH'EN Kang [7115 0474]
CHAO Hung-wei [6392 1347 4850]

ORG: Tientsin Teachers' College

TITLE: "On the Discovery of Quaternary Glacial Boulder Clay From the Northern Mountainous District of Chihhsien County"

SOURCE: Peking TI-CHIH K'O-HSUEH [SCIENTIA GEOLOGICA SINICA] in Chinese No 3, Jul 76 pp 277-285

TEXT OF ENGLISH ABSTRACT: Around Hsiaying, Hsiaokang and other villages in the northern mountainous district of Chihhsien county, to the south of the Great Wall of China extends from northwest to southeast a corridor-like belt of rolling hills, more than 30 km in length, and about 2-3 km in breadth. Along both sides of a river valley there exist terraces of three steps. The first-step terrace, made up of gravels, is 5 m above the modern river bed. The second-step terrace is a cut and built terrace, covered with a glacial boulder clay and loess, 15-20 m above the modern river bed. The glacial boulder clay about 5 m thick, with red, yellow and white spots, is called the mottled boulder clay. The third-step terrace is the bevelled hill tops,

[Continuation of TI-CHIH K'O-HSUEH No 3, Jul 76 pp 277-285]

50-60 m above the modern river bed. On the bevelled hill tops in the piedmont belt remains of glacial boulder clay is buried under the loess with ferruginous concretions. The clay, a little more than 5 m thick, reddish-brown in color, consolidated, is called reddish-brown boulder clay.

Tracing along some water channels from the rolling hills up to the northern mountains, we may find the valleys of the channels toward the sources take on the shape of a glacial trough and the relic of a glacial amphitheater. The bottoms of both the glacial troughs and the glacial amphitheaters are covered with yellowish-brown boulder clay, locally attaining more than 10 m thick.

The difference in both the degree of consolidation and weathering color among the three kinds of glacial boulder clay reflects the different periods of their accumulation, representing three ice ages in this district. The reddish-brown boulder clay represents the deposit of the earliest ice age, the mottled boulder clay deposit of the second ice age, while the yellowish-brown one the latest.

The remains of the former two glacial boulder clays occur on the rolling hills, while the last one exists only in the valleys near the source up in the mountain. Evidently, the two glaciers appearing earlier are comparatively large, while the one appearing latest is small.

CSO: 4009

SCIENTIFIC EXPERIMENT

AUTHOR: None

ORG: Peking Institute of Chemical Engineering and Metallurgy, Chinese Academy of Sciences

TITLE: "Gaseous Iron Smelting"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 1, Jan 77 pp 2-3

ABSTRACT: This article introduces the principles of the new approach to smelt iron ores by gas instead of the conventional coke reduction, with a description of the fluidization process as an example, and a schematic diagram comparing the fluidization process and the blast furnace operation for iron smelting. On the basis that petroleum, natural and industrial waste gases can be used for iron ore reduction instead of coke, that inferior quality iron ore can be used as the raw materials, that reduction can be conducted at much lower temperature, and that vanadium and titanium in compound ores can be selectively reduced, the article stresses the significance of the prospect of more fully exploiting the abundant inferior iron ore deposits in

[Continuation of K'O-HSUEH SHIH-YEN No 1, Jan 77 pp 2-3]

China, and the smelting of high-purity iron ore where no nearby good coking coal resources are at hand by the new technique.

AUTHOR: WANG Chung-i [3769 0022 0001]

ORG: Peking Iron and Steel Research Institute

TITLE: "Oxygen Bottom-blown Converter Steel Making"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 4-5

ABSTRACT: The author introduces the principle, construction, performance and characteristics of the newer technique of steel making by blowing oxygen from the bottom of converters to remove phosphorus from pig iron or steel wastes. Following a discussion on the advantages of the new technique, it is reported that a series of experiments on the new technique according to the resource characteristics of China has lately been conducted with definite satisfactory results. However, the problems of short furnace bed serviceable life, and requirement of liquid or gaseous fuel as the cooling agents of oxygen guns still remain to be solved.

AUTHOR: WU Chi-mei [0702 4949 2734]

ORG: None

TITLE: "Flash Smelting"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 5-6

ABSTRACT: Taking the smelting of copper ore as example, the author introduces the process, characteristics, principal equipment and superiority of the fast developing technique of flash smelting of nonferrous metals, where the processes of roasting and smelting of headings in preheated air to become mattes and slag are combined into a single continuous operation in a single unit of equipment that requires only 2-3 minutes for a single reaction, and is able to recover 90-96% from the reaction. However, the high copper content in the slags, and the higher demand on refractory materials, waste heat boilers, preheated air and feed preparations are problems still remain to be solved.

AUTHOR: CHU Ta-chung [2612 1129 0022]

ORG: Shanghai Toy Industrial Company

TITLE: "Forming Processing of Plastics"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 7-9

ABSTRACT: The author introduces the techniques, applications and recent development of some most common methods of plastic forming processing, namely: 1) extrusion forming; 2) injection forming; 3) pressure forming; 4) calender forming; 5) rotation forming; 6) cast forming; and 7) vacuum forming. In conclusion, the author stresses the importance of cold processing research, the treatment of raw materials, equipment and technology, the search for new types of plastics, and the adoption of such new techniques as automation programming control, laser cutting and drilling, microwave heating, and electronic computers with the forming processing to improve the yield and quality of plastic products.

AUTHOR: WANG Tao-chuang [3769 6670 5445]

ORG: Department of Surgery, Szechwan Post Office Box No 43 Fourth Hospital

TITLE: "Tetanus and Its Prevention"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 12-13

ABSTRACT: The author introduces the general knowledge concerned with tetanus with regard to: 1) the bacteriology of the pathogenic bacillus of tetanus; 2) the causes of tetanus incidences and severity; 3) the clinical symptoms and course of tetanus; and 4) the prevention of tetanus through environmental control, proper treatment of wounds, and protection with tetanus antitoxin and toxoid.

The author thanks Chao Li-chung [6392 3863 1813] and HSIEH Huai-ming [6200 2037 2494] for assistance in writing this paper.

AUTHOR: LI Hsiang-chou [2621 3276 3166]

ORG: Ch'ang-ch'un Institute of Material Testing Machinery

TITLE: "Low Temperature and Metallic Materials"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 1, Jan 77 pp 14-15

ABSTRACT: The author introduces the common knowledge concerned with cold shortness of metals in low temperature, and the consequent demands of low temperature withstanding metallic structural materials in modern engineering and industry. Based on a description of the three most common metal lattice structures, and the prospect of slips and dislocations within the structure caused by internal and external reasons, the author further explains how a type of lattice structure of metals corresponding to certain chemical compositions must be chosen, the addition of certain impurities, the improvement of the quality of welding, and adoption of certain metal processing techniques, can all contribute to meet the ever stricter demands of low temperature withstanding metals by modern engineering and industries.

AUTHOR: None

ORG: Tientsin Welding Institute

TITLE: "Magnetic Controlled Welding"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 1, Jan 77 pp 16-17

ABSTRACT: The author introduces the principles, circuits, techniques and characteristics of the new electromagnetically controlled welding technique that will help micronizing the crystals of welding gaps, welding reverse surfaces, encountering the interferences of scattered magnetic fields, controlling the width and depth of welding gaps, and avoiding welding deformation and cracks, and thus eliminates many defects of conventional welding. However, this impartation of external electromagnetic fields to welding is limited to electric welding only, and the technique is still far from perfect.

AUTHOR: None

ORG: Peking Analytical Instrument Plant

TITLE: "Model ZHD-01S Combined Chromatographic-Mass Spectrograph"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 17, back cover

ABSTRACT: This article introduces the Peking Analytical Instrument Plant's self-designed and self-developed model ZHD-01S combined chromatographic-mass spectrograph for applications in petroleum, chemical, physiologic, biochemical, food and environmental analysis of complex mixtures. The instrument first separates by chromatograph samples of complex mixtures into separate single components, and then determine each individual component qualitatively by mass spectrograph. A photograph of the instrument is shown on the back cover of this journal.

AUTHOR: LU Shu-ch'un [0712 2885 2504]

ORG: None

TITLE: "Oil Shale Refining and Its Comprehensive Utilization"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 18-19

ABSTRACT: The author introduces the general knowledge concerned with the properties, chemical compositions, process of dry distillation, construction and performance of dry distillation furnaces, processing of shale tar from oil shale refining to obtain gasoline, diesel oil, heavy oils, and almost 300 organic products of shales, and utilization of shale dust as fuels. It is reported that China has now self-developed a new type of square gas-fueled oil shale dry distillation furnace, a technique of using oil shale dust as boiler fuel for steam and power generation, and utilization of shale slag as an ingredient of bricks and cement.

AUTHOR: CHANG K'ai-sun [1728 7030 6676]

ORG: None

TITLE: "Capacitance Control"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 20-21, 19

ABSTRACT: The author describes the applications of the electronic signals derived from capacitance variations between matters in the regulation of liquid reactant levels, the control of plastic and enamel coating thickness, soft contact switches, and the control of human body inductions, as illustrations of the principles, characteristics and advantages of the new capacitance control technique, when coordinated with other electronic elements.

AUTHOR: TU Chien-hsing [2629 0256 5887]

ORG: None

TITLE: "Early Detection of Transformer Defects"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 22-23, 37

ABSTRACT: The author describes how transformer defects can be detected at an earlier stage by gas chromatographic analysis of the gases in the transformer oil. The general criterions are: high hydrogen and hydrocarbon levels indicate overheated bare metals; excessive carbon monoxide and carbon dioxide levels indicate decomposition of solid insulating materials from overheat; and predominant acetylene content indicates discharge malfunction. The techniques of sampling, use of carrier gases, and gas chromatographic analysis are also described.

AUTHOR: CH'EN Chin-fu [7115 6930 3940]

ORG: None

TITLE: "Plastic Sealing of Electronic Elements"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 24-25

ABSTRACT: Following a discussion on the characteristics of such resins as epoxy resins, silicone resins, phenol formaldehyde resins, allyl phthalate resins and others that are most commonly adopted in the plastic sealing of electronic elements, the author describes some methods of their forming that includes impregnation, moulded-in, injection, transfer molding, casting and powder coating, which should be selected according to the shape of the electronic element concerned, and the demand of electric properties.

AUTHORS: CHENG Hsuan [6774 1357]
CHIN Chin-t'ang [6855 3160 1016]
YU Pao [0060 1405]
T'ANG Cheng [0781 2398]

ORG: Peking Anti-earthquake Knowledge Editorial Section

TITLE: "Earthquake Knowledge"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 26-27

ABSTRACT: This column introduces four articles concerned with earthquake knowledge by various authors of the Peking Anti-earthquake Knowledge Editorial Section, namely: 1) How to judge the distance from the epifocus during earthquake by CHENG; 2) How earthquake imparts destructive effect on houses by CHIN; 3) Influence of after-shock on neighboring districts by YU; and 4) Causes of ground cracks and landslides by T'ANG.

AUTHOR: None

ORG: Wheat Research Section, Chinese Academy of Agricultural and Forestral Sciences

TITLE: "Introducing Three New Spring Wheat Varieties"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 1, Jan 77 pp 28-29

ABSTRACT: This article introduces the characteristics of three new superior spring wheat varieties, namely: 1) Ching-hung No 7; 2) Ching-hung No 8; and 3) Ching-hung No 9. The three new varieties were successfully hybridized by the Chinese Academy of Agricultural and Forestral Sciences since 1969, and are noted for their high yield of good quality wheat at an average of 400-600 kan per mou, but can be as high as 1,000 kan per mou, and outstanding resistance to lodging, but supply of water and fertilizer must be plentiful. The techniques of breeding these new varieties are also introduced.

AUTHORS: WEI Hung-chun [7614 7703 6874]
CHANG Chih-t'i [1728 3112 7555]

ORG: WEI of Institute of Plant Protection of the Chinese Academy of Agricultural Science, and CHANG of Honan K'ai-feng District Institute of Agricultural and Forestral Sciences

TITLE: "Some Insect-killing Seedling-protecting Plant Companion Medicine"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 1, Jan 77 p 29

ABSTRACT: The authors introduce the properties, indications and applications of five insecticides that have proved to be effective plant companion insecticides to control ground pests and protect seedlings. The five insecticides are namely parathion, diazinon, malathion, shradon and phosphamidon, all of which are organophosphates.

AUTHOR: HO K'un-pao [0149 0981 1405]

ORG: Agricultural Motion Picture Studio

TITLE: "Silver and Photosensitive Materials"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 30-32

ABSTRACT: The author introduces the general knowledge concerned with the use of silver halide as a photosensitive negative material in photography, the chemical process of their exposure to light, their development following image fixation, their final printing with photosensitive positive materials, and the recovery of silver and utilization. In a discussion on the search for nonsilver photosensitive materials, it is reported that the Soochow Photosensitive Material Plant has successfully developed a type of bubble film, where such photosensitive diazo or azido compounds are incorporated in a transparent layer of thermoplastic polymers.

AUTHOR: YEH Shih-hui [5509 1709 3549]

ORG: None

TITLE: "Solar Wind"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 32-34

ABSTRACT: The author introduces the general knowledge concerned with solar wind, with regard to the emission of solar plasma consists mainly of protons consequent to solar corona expansion, their temperature, density and velocity, their chemical composition, their range, and their relations to the earth with respect to the interplanetary and the earth's magnetic fields. A discussion is finally made on the significance of such interplanetary research.

AUTHOR: SUN Ching-ch'un [1327 2529 5028]

ORG: None

TITLE: "Laser Smoke Analysis"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 35-37

ABSTRACT: The author introduces the principles, techniques and equipment involved in the analysis of the diffusion and concentration of sulfur dioxide, carbon monoxide and nitrogen oxide in smoke cloud by laser radar. It is reported that since 1970, China has already successfully applying such technique to analyze the concentration distribution of artificial smoke cloud, and that in 1974, smoke cloud from three 120 meters high chimneys of a certain power plant was successfully analyzed by the same technique.

AUTHOR: None

ORG: This Journal

TITLE: "Technological News Briefs"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 pp 38-39

ABSTRACT: This section reports five technological news briefs, namely: 1) a capacitance type thickness measuring instrument developed by a steel rolling mill; 2) an atmospheric sulfur dioxide analyzer developed by the Tientsin Wei-hsing Semiconductor Parts Plant; 3) a portable silicon-controlled battery charger developed by the Seventh Anhwei Hofei Element Plant; 4) an automatic rope winding machine developed by the Tientsin Plastic Packing Machinery Plant; and 5) a vegetable sprinkler developed by some production brigades of Peking suburban communes.

AUTHOR: HU Yu-min [5170 5280 3046]

ORG: Hunan Provincial Hydroelectric Power Bureau

TITLE: "Shao-shan Irrigation Districts Chu-chin-tu Aquaduct"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese
No 1, Jan 77 p 40, front cover

ABSTRACT: The author explains the picture at the front cover of this journal of the Hunan Shao-shan Irrigation Districts Chu-chin-tu aquaduct. The aquaduct has a total length of 530 meters, crossing more than 70 mountains and more than 80 rivers, and is able to navigate ships up to 20 tons, and irrigates more than a million mou of farm fields. The construction work was started in the winter of 1965, and was completed in barely 10 months.

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CHINESE MEDICAL JOURNAL

AUTHOR: None

ORG: Yuan-ling County People's Hospital Communist Party
Branch Office, Hu-nan

TITLE: "Use Class Struggle As Guiding Principle Persist
On the Combination of Traditional Chinese and Western Medicine"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 7-9

ABSTRACT: A new medical department was established in 1970 to combine Traditional Chinese and Western medicine. Medical personnel went out to collect herb medicines, over 300 types of herb ointments, pills, pellets and powders were made in the hospital. Vocational schools were established to study Traditional Chinese and Western medicine. Experiences were obtained in combined treatment of over 50 kinds of diseases, including large surface burns, B encephalitis, leptospirosis, epidemic hemorrhagic fever, snake bites and eczema. The following review of this experience was made.

[Continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
pp 7-9]

Correct the direction and line, to incessantly fathom combined Traditional Chinese and Western Medicine Only under the use of class struggle as guiding principle, can combined traditional Chinese and Western Medicine be carried out under the Party's basic line. An example of a case of massive hemorrhage from peptic ulcer was given. The case was treated with combined conservative method that avoided high risk surgery, and recovered with very little expenses. This encouraged further use of combined methods. In 1974 the program was interrupted because of incorrect line carried out by the administration. The Party corrected this by organizing the staff to study Marxism-Leninism and Mao Tse-tung's Thoughts.

Leaders take part in practical work, to incessantly development combined Traditional Chinese and Western Medicine Party leaders lead the staff in carrying out this combined program. The Party secretary worked and studied with the staff in different departments, solving problems on the spot.

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
pp 7-9]

A case of hemoptysis was cited where the Party encouraged a doctor to successfully treat the case with combined methods. 'San huang powder' was successfully used to treat a 92.3% surface burn. Local herb medicines were used to dry up burn surfaces, thus preventing fluid loss and infections. Fourteen cases with coal dust contaminated extensive burns were successfully treated with no scar formation or functional disturbances. Comparison was made of a case of 80% surface steam scald formerly treated with conventional methods and died, with a comparable case that recovered under present combined methods.

Give the mass a free hand to create new accomplishments in Combined Traditional Chinese and Western Medicine. The mass must be given a free hand to carry out its creative power. The infectious disease, pediatrics and new medicine departments cooperated to successfully tackle epidemic hemorrhagic fever and B encephalitis. The outpatient and clinical departments developed injection No. 7203 and treated 1948 cases of upper respiratory tract infections, pneumonia, boils,

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
pp 7-9]

mastitis and chronic pelvic infections with different degrees of success. Family members of the staff helped in picking herb medicines. Simple prescriptions for different diseases were obtained among the people, and animal or human experiments were carried out to study them. Research on snake bite was carried out by collecting the different methods used locally and carrying out animal experiments to determine their effects. Four prescriptions were chosen to treat 32 cases, the cure rate was 95%. The creative spirit of the mass must be given support. Two nurses successfully treated two cases of paralysis with acupuncture and herb medicines. Acupuncture anesthesia and herb medicine anesthesia were successfully used in a number of surgical conditions.

AUTHOR: None

ORG: Wu-li-chiao Area Hospital, Lu-wan District, Shanghai

TITLE: "Fully Utilize the Function of the 'Worker Doctor' in the Field of Prevention of Vocational Diseases"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 10-11

ABSTRACT: This area hospital mainly takes care of factory workers under the health insurance program. The daily sick call rate used to be just about 2,000, reaching a peak of 2,500. After fully utilizing the function of the 'worker doctor' in the factories, the sick call rate dropped 19% inspite of an increase of 44.5% of the total number of workers under care. Factory workers were chosen and given a short medical course training. These workers continued to work as factory workers and took part in the prevention and treatment of diseases. Weekly activities were carried out to improve their medical knowledge. Medical personnel from the hospital took part in these activities. These 'worker doctors' also took part in periodic physical examinations of the

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77 pp 10-11]

factory workers, measurement of air conditions and room temperatures of work houses. A class was held to train laboratory examination of copper, benzol and mercury poisoning. Subsequently all tests for these poisoning were carried out in the factories. These 'worker doctors' were also able to detect noxious material levels in the factories. A spray paint workhouse was found with high concentration of benzol and a nylon workhouse was found with high noxious material by 'worker doctors'. These were reported and corrections were made. The possibility of fully utilizing these 'worker doctors' was discussed.

AUTHOR: None

ORG: Gallstone Section, No. 372 Hospital, Chinese People's Liberation Army

TITLE: "Results of Combined Traditional Chinese and Western Medicine in the Treatment of Gallstone Disease"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 12-15

ABSTRACT: Combined Traditional Chinese and Western Medicine was used in the treatment of 233 cases of gallstone disease. Most cases had repeated attacks. Cholecystography was performed in 167 cases, with confirmed gallstones in the gall bladder in 71 and in the bile ducts in another 71. Operation was previously performed with gallstone removal in 41 cases. The indications for selecting cases to undergo combined Traditional Chinese and Western Medicine treatment were given. Traditional Chinese Medicine classification showed stagnant type 171 cases, damp fever type 51 cases, toxic type 1 case.

Treatment methods included the following: 1. Chinese

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77 pp 12-15]

herb medicine: Stone disposal decoction which included herba artemisiae capillaris, guscute japonica, bupleurum falcatum, azadirachtae fructus, cyprus longus, aegle sepiaria, curcumin, aucklandin costus, peel of orange, rhubarb, natrium sulfuricum. Additional herb medicines were also added for fever, nausea and vomiting, poor appetite, abdominal distension and worms. 2. Electric plate acupuncture point treatment: Saline gauzes were wrapped around electric plates and placed over the acupuncture area. Electric current was passed for 60 minutes daily, 15 treatments constituted a course. 3. Electric acupuncture, once or twice daily. The acupuncture points were chi-men [2601 7024], jih-yeh [2480 2588], yang-kang [7122 1511], tan-yu [9116 0205], tsu-san-li [6398 0005 6849], yang-ling-ch'uan [7122 7117 3123]. 4. Oral medication of 50% magnesium sulfate 40-60 ml. daily. 5. Combined stone repelling method: Combined use of stone disposal decoction, morphine, magnesium sulfate, diluted HCl, fatty diets, atropine and electric acupuncture. 6. Severe cases were given parenteral fluids, antibiotics and liver protection drugs. In 145 cases

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with bile duct stones, the stone repulsion rate was 97.9%; in 78 cases of gall bladder stones, the repulsion rate was 87.2%. Clinically the cure was 44.4%, improved 49.8%, no effect 5.8%. Follow-up studies of 55 cases discharged over 6 months showed no recurrence and back to work in 37 cases, occasional symptoms that did not affect work in 17 cases, and repeated recurrences in 1 case.

AUTHOR: FANG Kan [2455 1626]
CHOU Tsung-chih [0719 1350 2535]

ORG: FANG of Department of Surgery, Capital Hospital, Chinese Medical Scientific Institute; CHOU of Department of Surgery, Shih-ho-tse Medical College Affiliated First Hospital, Sin-kiang

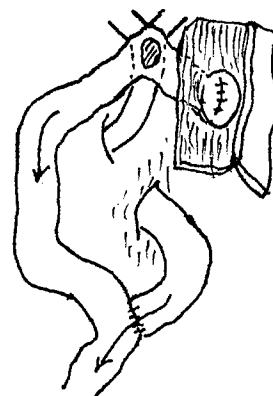
TITLE: "Subcutaneous Blind Loop, Common Hepatic Duct Jejunal Anastomosis in the Treatment of Bilateral Hepatic Duct Gallstones"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 15-19

ABSTRACT: Bilateral intrahepatic gallstones usually are multiple and sandlike. It is hard to thoroughly remove them at surgery and frequent recurrences occur that require repeated surgery. A surgical procedure is devised to tackle this problem. During the first operation the common hepatic duct is cut open and as much of the stones removed as possible. The jejunum is divided and the lower arm of the loop brought up. An anastomosis is made between the common hepatic duct and the side of the lower loop. The end of the lower loop

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
pp 15-19]

is closed and buried subcutaneously on the right side of the upper abdominal wall. The lower end of the upper loop of the jejunum is anastomosed to the side of the lower loop in a Roux-y or Brown fashion. This operation serves the purpose of when intrahepatic duct gallstone symptoms recur, the blind end of the buried loop can be opened and the stones removed through the hepatic duct jejunal anastomosis. This avoids entering the peritoneal cavity and extensive dissection of adhesions around the hilum of the liver. From Dec. 1973 to July 1974, this operation was performed on 6 patients. One patient died 18 days after operation. Two patients subsequently developed recurrence symptoms and were relieved after opening the blind loop to remove stones. The operative procedure was described in detail.



AUTHOR: P'ENG Te-shu [1756 1795 1859]
CHEN Chia-ning [7115 0163 1626]

ORG: Surgery Teaching and Research Section, Affiliated Hospital, Sze-chuan Medical School

TITLE: "Porta-azygos Vein Interruption in the Treatment of Massive Hemorrhage of the Upper Alimentary Tract Caused by portal Hypertension"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 19-21

ABSTRACT: During 1964-1973, 71 emergency operations were performed for upper alimentary tract massive bleeding caused by portal hypertension. In 64, porta-azygos vein interruption was performed. Severe shock was present in 60 patients on admission. The operative procedure was described. It consists essentially of division and ligation of the vessels of the gastrosplenic ligament, vessels of the left gastroepiploic artery, ligation of the splenic artery and splenectomy; division

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
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and ligation of the branches of the left gastric artery and gastro-coronary veins of the proximal half of the stomach; ligation and division of the vessels around the cardia and lower esophagus (within 3 cm. from the cardia). There were 22 operative and early deaths. The causes of death included: massive hemorrhage 5, hepatic failure 6, reno-hepatic failure 2, shock 7, bronchopneumonia and cardiac failure 1, massive ascitis leak, dehiscence and peritonitis 1. The degree of hepatic function compensation seemed to affect the results. The more severe the hepatic function decompensation manifestations, the higher the mortality. Of the 42 cases that survived, follow-up studies of 1-10 years were obtained in 38. Five had died, 2 of massive hemorrhage, 1 each of acute necrotic pancreatitis, toxic shock and septicemia. Of the 33 living, 21 had returned to full work, 11 had returned to light work, 1 was incapacitated by rheumatic heart disease.

A comparison of this operation with other operative procedures was made. It was pointed out that although emergency diversion procedures give better control of bleeding,

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
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the operative procedures are much more extensive, highly trained technique is required, and the hepatic compensation of the patient must be good. The immediate operative death rate is also higher. Transthoracic ligation of varicose veins results in many complications and high mortality. Transgastric ligation of fundus veins frequently results in recurrence of bleeding and there is the danger of peritoneal contamination. The advantages of porta-azygos vein interruption are as follows: The mortality rate and immediate recurrence of bleeding rate are not higher than other procedures; long term results are good, there were no cerebral diseases or hepatic failure in the cases followed in this group; the operative procedure is simple and less damaging to the patient.

AUTHOR: HO Pai-wei [0149 2672 1218]

ORG: Prevention and Treatment of Schistosomiasis Station,
Ning-kuo County, An-hui

TITLE: "Management of Hemorrhage from Rupture of Esophageal
and Fundus Varicose Veins in Late Schistosomiasis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 22-25

ABSTRACT: Surgical treatment was given to 2,685 cases of late stage portal hypertension caused by schistosomiasis during 1958-1973. Among these, 324 were performed as emergency procedures for acute hemorrhage, 525 others had hemorrhage during the course of the disease. An analysis of the operative procedures and results were made in these 849 cases.

1. Transabdominal ligation of gastric fundus varicose veins: This operation was carried out in 54 cases. All were emergency procedures. The post-operative death rate was 46%, complication rate 62% and recurrence of bleeding 19.35%. This method has been abandoned after 1961.

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
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2. Disruption of coronary flow: Dissection and phlebectomy of the main coronary vein and branches under direct vision was carried out in 36 cases. Post-operative improvement occurred in 38.8%. As there are other veins connected with the fundus, disruption of the coronary alone is not sufficient.

3. Splenectomy: This was performed in 409 cases, 101 were emergency operations and 308 selective procedures. Analysis of 258 cases showed post-operative lowering of portal hypertension of 9.63 ± 0.3 cm. H₂O, recurrence of bleeding in 14.34%. Follow-up studies 3-5 years later showed improvement of varicose veins in 34% and improved labor capacity in 83%. Wrapping the omentum around the kidneys or retroperitoneal omentopexy in addition to splenectomy did not improve the results.

4. Diversion operations: Diversion operations were carried out in 307 cases, including spleno-renal shunt 278, porta-caval shunt 12, superior mesentero-caval bridge 15,

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superior mesentero-caval anastomosis 2. The results of spleno-renal shunt showed lowering of portal hypertension of 10 ± 1.35 cm. H₂O in end to side anastomosis and 12.25 ± 1.99 cm. H₂O in side to side anastomosis; improvement of varicosity in 10% after 2-3 weeks and in 52.1% after long term follow-up in end to side anastomosis and in 61.1% after 2-3 weeks in side to side anastomosis. Recurrence of early bleeding occurred in 5 cases of 189 end to side anastomoses and 1 of 89 side to side anastomoses. Post-operative cerebral disease occurred in 2 cases of end to side anastomoses and in 4 cases of side to side anastomoses. There were 3 post-operative deaths in this group of spleno-renal shunt. The author believes that side to side anastomosis accomplishes the purpose of diversion more completely. Some details of the operative technique were given.

5. Disruption of vessels surrounding the stomach and esophagus and splenectomy: This operation was carried out in 79 cases, 39 were emergency operations. After splenectomy,

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the left gastro-epiploic vessels, short gastric vessels and right gastro-epiploic vessels were ligated and severed. Vessels around the lower 5 cm. of the esophagus were also ligated and severed. There were 4 early recurrences of bleeding. Follow-up studies of 36 cases for 1-4 years showed 2 cases with melena and improvement of varicosity in 41%. This operation is simple, may be performed in cases not suitable for diversion operations, and is effective in emergency control of hemorrhage.

AUTHOR: None

ORG: Pediatric Surgery Department, Affiliated Sin-hua Hospital,
Shanghai Second Medical School

TITLE: "Analysis of Missed Diagnosis in Acute Appendicitis
in Children"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 26-28

ABSTRACT: During 1970-1974, 125 cases of ruptured appendix were diagnosed at operation, 34 (27%) were the results of missed diagnosis. In 10 cases below 4 years old, a missed diagnosis was made in 6; in 115 cases between 4-12 years old, a missed diagnosis was made in 28 (24%). On admission the following wrong diagnoses were made: Ascariasis 7, acute mesenteric adenitis 3, primary peritonitis 2, bile duct ascariasis 2, acute gastroenteritis 2, bacillary dysentery 1, acute intestinal obstruction 1, Meckel's diverticulitis 1, upper respiratory tract infection 1. Another 14 cases were admitted as abdominal pain for observation. The missed diagnoses were attributed to the following reasons: incorrect

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
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differential diagnosis with diseases such as ascariasis, acute mesenteric adenitis, primary peritonitis, acute gastroenteritis, and bile duct ascariasis; delay of hospital visit after onset of disease because of the peculiarity of appendicitis in children; atypical position of appendix and symptoms; peculiarity of severe general reaction and unclear history in infants; covering up of subjective symptoms due to fear; improper or inaccurate physical examination; unreliable history; inconsistent WBC count. Discussions were made to overcome the above difficulties.

AUTHOR: None

ORG: Radiology Department and Alimentary Tract Disease Department, Chung-shan Hospital, Shanghai First Medical School; Pathological Anatomy Teaching and Research Section, Shanghai First Medical School

TITLE: "Discussion of Several Problems Concerning the X-ray Diagnosis of Gastric Antritis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 29-31

ABSTRACT: Analysis was made of 108 cases of gastric antritis diagnosed by X-ray studies, gastroscopy and pathological examination. X-ray diagnosis was based on thickening of the mucosa, filling defects and contraction function. Thickening of the mucosa may be of various forms, there was circular or oblique thickening in 31% and longitudinal thickening in 25%. Normal filling usually shows smooth greater and lesser curvatures, in antritis there may be jagged filling defects on both curvatures, mainly on the lesser curvature. These

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77 pp 29-31]

filling defects were found in 53% of the cases. Other filling defects included lesser curvature indentations, localized filling defects and pseudo ulcers. There was no filling defect in 35%. Contraction function may be disturbed in antritis, X-rays showing antrum spasm and pre-antral contraction. This was found in 63%. Basing on the above X-ray signs, 76 cases were correctly diagnosed.

Pathologically antritis may be classified as superficial, atrophic and hypertrophic. Description was made of the mucosa seen by gastroscopy in the different types of antritis. Pathological examination revealed 22 cases with enteric gland changes and intermediate changes. It was found not practical to make pathological diagnosis by X-ray studies, but the following types of X-ray diagnoses may be made: mild hypertrophic antritis; polypoid antritis; constrictive or spastic antritis. The first type is seen most frequently, it may be treated conservatively. The second and third types are seen less frequently, they should be watched to exclude malignant

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
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changes. Clinically antritis may exist in 3 forms: simple antritis with no complications; complication of duodenal bulb ulcer; antritis coexisting with gastric ulcer. In this group there were 73 cases of simple antritis and 35 cases of antritis with peptic ulcers. Among the 108 cases of antritis, there were no malignant changes.

AUTHOR: MOU Chih-ch'ien [4924 5347 5409]

ORG: Gynecology and Obstetrics Department, Lu-an County People's Hospital, An-hui

TITLE: "Report of 28 Cases of Ectopic Pregnancy Treated With Chinese Herb Medicine 'Tuan-hsieh-liu [2451 5877 3177]'

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 32-33

ABSTRACT: Tuan-hsueh-liu was used in the treatment of 28 cases of ectopic pregnancy. There were 18 cases in shock state, 3 cases in unstable state and 7 cases in mass formation state. Diagnoses were made by history, physical examination and intraabdominal aspiration of unclotted blood (no aspiration for mass formation). Patients in shock were treated with fluid replacement and blood transfusion when necessary. Tuan-hsueh-liu was given 3 capsules or 4 tablets 3X per day. The usual course was about 10 days, modified according to the general condition. All cases recovered without surgery. Abdominal pain usually decreased after 2-3 days, and became

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localized in a part of the lower abdomen. Subsequently there was passing of dark stools. The localized mass was usually absorbed in 2-4 weeks. Vaginal bleeding usually ceased in about 14 days. Follow-up studies of all cases were made, 12 for over 2 years, 13 for over 1 year and 3 within 6 months. Three cases became pregnant, 1 with full term delivery, 2 had tubal ligations and excision of ovarian cysts, there were no adhesions in the pelvis or surrounding tissues. All other cases returned to work without complications. Three illustrative cases were reported.

AUTHOR: CHIN Ch'un-nan [6855 2504 0589]
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CHANG Wü-ch'i [1728 1342 3825]
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ORG: CHIN of Radiology Department, Chung-king City Surgical Hospital; CHANG, HO of Thoracic Surgery Department, Chung-king City Surgical Hospital; YU, WONG, SUN, CHOU of Radiology Department, Hsu-chow Medical School Affiliated Hospital; HSIA of Radiology Department, Ch'ang-wei Area Hospital, Shan-tung; HSIA, T'ANG of Hsu-chow City First People's Hospital; HSIEH, CHANG of Surgery Department, Hsu-chow Medical School Affiliated Hospital

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 1, 15 Jan 77
pp 34-37]

TITLE: "Diagnosis of Traumatic Diaphragmatic Hernia (Report
of 30 Cases)"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 34-37

ABSTRACT: Analysis was made of 30 cases of traumatic diaphragmatic hernia. There were 5 cases caused by open trauma (ox horn penetration, stab wound and gunshot wound), 21 cases caused by closed injury (hit by fallen wall, falls, hit by falling objects, compression injuries, car accident), and 4 cases of other causes (surgery, blasting injury, severe vomiting). The hernia was left sided in 24 and right sided in 6. In left sided hernia, the contents of herniation were mostly the stomach, small intestine, large intestine and omentum. In right sided hernia, the contents were mostly part of the liver. Symptoms and signs depended on the contents of herniation and extent of functional disturbances. Twenty five cases had acute symptoms of dyspnea, chest pain and shock. Five cases had chronic symptoms. Other complications included fracture of

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the ribs, femur, humerus, pelvis and spine; atelectasis; hemothorax; ruptured liver; traumatic wet lung. Incorrect diagnoses were mostly made of hemothorax, congenital lung cyst, bronchiectasis, atelectasis and pleurisy. X-ray examination was stressed in establishing diagnosis. X-ray findings included: Elevation of the diaphragm on one side; condensed shadows (omentum or solid organs) in the chest; air sacs (stomach or intestine) in the chest; displacement of the heart; dilute barium meal studies showing the stomach or intestine in the chest. Other injuries such as fractures, hemothorax and pneumothorax may also be shown in X-ray studies. Five illustrative cases were reported.

AUTHOR: LI Chieh [2621 0512]
WONG Sheng-yung [3769 5116 8673]
CHEN Chung-ching [7115 0022 2529]

ORG: None

TITLE: "Discussion of Epidemic Characteristics of Diphtheria in the Farms --- Survey of a Diphtheria Epidemic in the Farms in An Area of Northwestern China"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 38-40

ABSTRACT: During Jan.-May of 1965, 78 cases of diphtheria were reported in the farms in an area of Northwestern China. The area was divided into 14 districts, each with a population of 7,000-9,000. Survey showed that sporadic diphtheria immunization was carried out in 1963-1964, the immunization rate in children under 8 years of age was 51.7-88.1% in the different districts. The incidence of diphtheria was in accordance with the Poisson distribution. The geographic distribution of the cases showed that the incidence was higher in districts where immunization was not carried out or the immunization

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rate was low. In one district, the effective immunization rate in children under 14 years old in 7 brigades was low (35.1%), the incidence of diphtheria was 5.7%; the rate in another 8 brigades was high (66.7%), the incidence of diphtheria was 0%. Survey of 1,442 inhabitants showed an incidence of 5.41%, the smallest age was 10 months and the oldest was 22 years old. The highest incidence was in the 10-15 years old group. The wide range in age and the high incidence in older children are characteristics seldom seen in urban areas. The survey showed that this was not due to immunization limited to children under 8 years of age, for in two districts where no immunization was carried out, the age incidence was the same as in other districts. The epidemic reached the highest peak during the end of February to the end of March, in contrast to the usual high seasonal incidence in autumn. There were 4 deaths, a death rate of 5.1%. It was concluded that immunization is effective in the prevention of diphtheria, in the farms immunization should not be limited to the age group below 8 years old, but should be extended to within 15 years of age.

AUTHOR: None

ORG: Military Medical Research Institute, Cheng-tu Army
Service of Supply

TITLE: "Survey of the Bactericidal Effect of Marsh Gas Cess-
pool in the Management of Manure"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 41-42

ABSTRACT: Twenty marsh gas cesspools were erected for the management of manure. Experiments were carried out to study the bactericidal effects, the parasiticidal effects and the effects on nitrogen concentration. Samples were obtained and cultured from the entrance of the cesspool and from the manure fluid used after treatment. The results showed that after treatment the B. coli index dropped on an average of 99.73%, the total bacteria count dropped on an average of 86.84%. Samples of Flexner dysentery were mixed with manure treated in the cesspool, marsh gas was passed through in one group which showed bacteria survival for 9-13 days. In another

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group where marsh gas was not passed through, the survival time was 11-15 days. Determination of nitrogen content showed an average increase of 32.95% after treatment in the cesspool. Survey of parasite survival after treatment showed sedimentation of 98.32% of parasite ova, the ova of hookworm and schistosoma were all dead within 3 months. The method not only is effective in killing bacteria and parasites, but also increases the nitrogen contents and improves the quality of the fertilizer.

AUTHOR: HSU Jung-k'uei [1776 2837 1145]

ORG: Department of Internal Medicine, Schistosomiasis Prevention and Treatment Hospital, Nanking City

TITLE: "Discussion on the Factors Causing Elevation of GPT by Antimony 273"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 43-45

ABSTRACT: During 1971-1973, antimony 273 medium speed No. II tablets were used to treat 960 cases of schistosomiasis. Analysis of 530 cases which had hepatic function tests before and after treatment was made. The results showed that GPT elevation was more marked in females than in males, in late cases than in early cases, and in patients not given liver protection drugs than in those given protection. The GPT elevation was also more marked in short course high daily dosage treatment. Nausea, vomiting and anorexia were usually more marked when GPT was elevated. There was no difference in GPT elevation between the age below 30 and above; between laborers and office workers; whether there was a history of

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hepatitis or not; in first treatment or repeated treatment; whether there were other complicating diseases during treatment or not. The whole group showed GPT elevation of 66.6% and toxic hepatitis of 5.2%. There was not a single case of cardiac toxicity leading to Stokes-Adam syndrome. It seemed that liver toxicity was the main complication of antimony 273 and the high daily dosage was a factor. If the daily dosage can be regulated and liver protection drugs be given, liver toxicity can be minimized. In 5 cases of toxic hepatitis in this series, adequate treatment resulted in recovery within 14 days.

AUTHOR: SUNG Kuo-hsiang [1345 0948 4382]
WU En-hui [0702 1869 1920]

ORG: SUNG of Ophthalmology Department, WU Of Radiology Department, Tien-tsin Medical School Affiliated Hospital

TITLE: "Use of Orbital Radiography in the Differential Diagnosis of Unilateral Eyeball Protrusion"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 46-49

ABSTRACT: Orbital radiography with opaque media injected into the intraorbital pyramidal muscles was performed in 34 patients with unilateral eyeball protrusion. The technique was briefly discussed. In 31 cases the radiography was satisfactory, and a correct diagnosis was made in 25, including 16 abnormal and 9 normal readings. The normal radiography was briefly discussed. Among 20 abnormal radiographies, there were filling defects in 14, which included hemangioma 5, pseudo tumor 2, intraocular meningioma 1, neurolemmoma 1, optic nerve glioma 1, dermoid cyst 1, unknown 3. There were peripheral indentation

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in 3, which included neurolemmoma 1, hemangioma 1, and pseudo tumor 1. There were inadequate diffusion or irregular filling defects in 3, which included pseudo tumor 2 and unknown 1. The authors believe that this method is superior to air radiography or intravascular radiography. The results were particularly clear in space occupying encapsulated clear edge masses. In pseudo tumors the radiography was less satisfactory, as the manifestations were multiple and inconsistent. Suggestions were made to improve the results of this technique.

AUTHOR: PAI Ch'in-sheng [4101 4440 3232]

ORG: ENT Department, First Affiliated Hospital, Si-an Medical School

TITLE: "Determination of The Feasibility of Reimplantation During Tympanoplasty Judging From the Pathological Changes of The Malleus and Incus in Chronic Suppurative Otitis Media"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 49-50

ABSTRACT: During operative treatment of 51 patients (55 ears) for chronic suppurative otitis media, the malleus (53) and incus (48) were removed and studied with magnifying lens and under the microscope. Under the magnifying lens it was found that 20 of 53 malleus (38%) and 28 of 48 (58%) incus were damaged. Under the microscope it was found that 57 of 101 (57%) ossicles showed inflammatory changes. The degree of damage did not show a definite pattern in the various types of otitis media. The damages seen under the magnifying lens also did not necessarily correspond to the inflammatory changes seen under the microscope. The inflammatory changes seen under the microscope

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were of such nature that the ossicles could possibly recover and be used for reimplantation. The author's experience in autogenous reimplantation of the ossicles during tympanoplasty proved this to be true. The following conclusions were drawn: Gross examination under the magnifying lens cannot accurately determine whether there is inflammation of the ossicles, therefore it cannot be depended upon to determine the possibility of reimplantation; from the pathological standpoint, some ossicles may be retained for reimplantation.

AUTHOR: SHEN Yao-tsung [3947 5069 1350]
CHIANG P'ei-ming [5592 0160 2494]

ORG: Surgery Department, Hsu-chow Medical School Affiliated Hospital

TITLE: "Rupture of the Trachea (Report of Case)"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 51-52

ABSTRACT: A 42-year-old male was hit by the handle of a farming fork on the left side of the neck. He was admitted with dyspnea and extensive subcutaneous emphysema of the face, neck and upper chest. Examination revealed a wound 4X3 cm. on the left side of the neck, extending downwards for 7 cm. Air was heard coming out of the wound. X-ray fluoroscopy revealed right pneumothorax and a collapsed right lung. Aspiration and closed drainage did not relieve the dyspnea. Rupture of the trachea was suspected and thoracotomy was decided upon. Endotracheal intubation was attempted but failed, so thoracotomy was performed under local anesthesia.

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A 3 cm. rupture of the trachea was found. Interrupted silk sutures were used to repair the rupture. A higher left sided tear about 2 cm. long was also found, but it was difficult to expose and was not repaired. A rubber tube was laid for drainage. The patient recovered smoothly and follow-up studies 3 months later showed no ill effects. The mechanism of rupture of the trachea, the diagnosis and treatment were briefly discussed.

AUTHOR: None

ORG: Oro-maxillo-facial Surgery, Affiliated 9th People's Hospital, Shanghai Second Medical School

TITLE: "Clinical Observation of Immediate Use of Frontal Skin Flap to Repair Oro-maxillo-facial Tumor Postoperative Defects"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 53-55

ABSTRACT: During 1956-1976, frontal skin flaps were used to repair oro-maxillo-facial tumor postoperative defects in 77 patients. The areas involved were cheek mucosa 29, cheek skin 5, zygoma infraorbital area 7, nasal area 5, tongue and mucosa of oral base 12, oropharyngeal area 10, intraorbital 3, ear and parotid gland area 5, chin 1. The skin flaps were classified according to the method of transplantation and the number of operations. There were the pedicle rotation flap (1 operation in 10 cases, 2 operations in 10 cases) and the tunnel flap (57 cases). The flaps were also classified according to the source of blood supply, which included the

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superficial temporal artery as main supply in 26 cases, the superficial temporal and posterior auricle vessels in 38 cases, occipital and posterior auricle vessels in 7 cases, bilateral scalp vessels in 2 cases, and frontal and inner canthus vessels in 4 cases. The results of flap survival were successful in 65 and failure in 11, a successful rate of 85.5%. The advantages and disadvantages of the method were discussed. Important points were mentioned in the performance of tunnel flaps, which were used in intraoral defects. Analysis of the 11 failures showed that the main reasons for failure were inadequate blood supply and infection.

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CHOU Yüan-p'eng [0719 6678 7720]
CHANG Li-ying [1728 7787 5391]
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ORG: Pharmacology Section, Pharmaceutical Research Institute,
Chinese Medical Scientific Institute

TITLE: "Pharmacological Research of Chinese Rauwolfia
VIII. The Hypotensive Action and Action on the Hemodynamics
of Anesthetized Dogs of Sarpagine"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 56-58

ABSTRACT: The total alkaloid of rauwolfia contains more than 20 alkaloids. Intravenous injection or oral ingestion may cause lowering of B.P. Extraction showed a high content of alkaloid No. 6, which on identification was found to be sarpagin. Animal experiments were carried out to study the hypotensive action of sarpagin and its action on the hemodynamics of the anesthetized dog. In 3 renal hypertensive dogs, at weekly

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intervals sarpagin was given the first and second times, then phentolamine was given the third time. Each injection was immediately followed by a drop of B.P. and tachycardia, the action was more pronounced with phentolamine. Noradrenalin or adrenalin was injected into 3 anesthetized cats to cause hypertension. When sarpagin was then given, the B.P. dropped 50-60%. Reinjection of noradrenalin or adrenalin now did not cause marked hypertension. When sarpagin 1 mg./kg. was given intravenously to anesthetized dogs, there was marked drop of B.P., marked drop of vascular resistance in the internal carotid, coronary and femoral arteries, increase of internal carotid and femoral blood flow and slight decrease of coronary flow. When 0.1-0.2 mg./kg. was given there was no B.P. change, the coronary flow was markedly increased with lowering of vascular resistance, cerebral vascular resistance was also decreased. In 5 anesthetized dogs, injection of sarpagin caused marked lowering of B.P., the cardiac index was increased 23.2% in 2-5 minutes, the total peripheral vascular resistance

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was lowered 33.9% in 2 minutes and 24.2% in 5 minutes. The above experiments prove that serpagin is an adrenergic receptor blocking agent. It also is a vasodilator. When the B.P. is lowered, there is no decrease of cerebral or cardiac blood supply. These actions make this drug useful in the treatment of cardiovascular diseases.

AUTHOR: None

ORG: An Air Force Hospital, Chinese People's Liberation Army

TITLE: "Clinical Pathological Conference Case 39 ---
Abdominal Distension, Wasting, Ascitis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 59-63

ABSTRACT: A 22-year-old male was admitted because of abdominal distension, lassitude and wasting for over 40 days. Examination revealed shifting dullness of the abdomen and slight edema of the lower extremities. Routine blood examination and liver function tests were essentially normal. X-ray examination of the chest and liver scanning with ¹⁹⁸gold were normal. Aspiration of the abdomen revealed straw colored fluid and then meaty colored fluid. Tuberculous peritonitis was suspected but treatment failed to show improvement. The ascitis became more severe and paracentesis had to be done for 11 times during his 5 months of hospitalization. Malignant tumor was suspected and laparotomy was performed. No intraabdominal tumor was

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found. The liver was congested and appeared purplish red. The gallbladder was small, thickened and white. Some adhesions were found. Cholecystectomy and lysis of adhesions were performed. The patient went into postoperative shock and died on the third postoperative day.

The following diseases were considered in the discussion:

1. Tuberculous peritonitis: Anti-tuberculous treatment failed to improve the condition. There was no fever, anorexia or other toxic symptoms. The ascitis fluid was much more than that found in tuberculous peritonitis. No other tuberculous lesions were found. 2. Intra-abdominal tumor: Against this diagnosis were comparatively good health after 6 months of ascitis, no palpable mass and no malignant cells found in the ascitis fluid. 3. Constrictive pericarditis and constrictive myocarditis: Against this diagnosis were no circulatory congestive signs, no cardiac changes. 4. Pancreatic ascitis: Against this diagnosis were no history of trauma to the pancreas, the ascitis fluid showed normal amylase values. 5. Retroperitoneal fibrosis or fibrotic syndrome: A granulomatous

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disease pressing on the inferior vena cava causing ascitis. Against this diagnosis were no marked swelling of the lower extremities, no urinary system symptoms. 6. Obstruction of hepatic vein: A rare disease with hepatic congestion and ascitis. Less than half of the cases reported were diagnosed before death.

Autopsy report: Hepatic vein web formation, partial obstruction of the hepatic vein, congestive hepatic cirrhosis. The mechanism of ascitis formation in this disease was briefly discussed. The etiology was also mentioned. The methods of diagnosis were given.

AUTHOR: CHU Hsin-ts'ai [2612 2450 2088]

ORG: T'ang-chi Area Health Center, Lien-shui County, Kiang-su

TITLE: "Simple Extraabdominal Manipulation in the Treatment of Bile Duct Ascariasis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 25

ABSTRACT: During acute attack of abdominal pain, the patient lies on his back with the knees bent. Fixed tenderness is usually found at the subcostal border slightly right of the xiphoid. When the patient is not aware, the operator suddenly presses on the tender spot with his four fingers and quickly releases. The pain is usually suddenly relieved or only vague dull pain remains. The procedure may be repeated. This method was used on 100 patients with immediate pain relief in 64, improvement of symptoms with persistence of vague pain in 31, and no effect in 5. It was suggested that the sudden stimulation suppresses the stimulation that caused spasm of the sphincter of Oddi, it also causes increase of intraabdominal and bile duct pressures. Under such conditions the impacted ascaris may be pushed back into the duodenum.

AUTHOR: LIU Wen-lung [0491 2429 7893]

ORG: Surgery Department, Pao-ting Area First Hospital, Ho-pei.

TITLE: "Pressure On Acupuncture Points in the Treatment of Bile Duct Ascariasis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 28

ABSTRACT: The patient sits on a chair and lowers his head. The doctor's right thumb presses on the tan-ching [9116 3997] acupuncture point (2 cm. below outer 1/3 of spine of right scapula) and rubs about, gradually increasing with force. The left thumb presses on the shu-tan [6551 9116] acupuncture point (right subcostal level and upper border of sacrospinalis) moving left and right with force. The patient holds his breath during the procedure, which takes 3-5 minutes. It may be repeated in 10 minutes. In 74 cases, the method was effective in over 95%. It was suggested that pressure on acupuncture points produced stimulation of the same pathway that caused spasm of the common bile duct, changing a pathological reaction to a physiological reaction that relieves the spasm of the bile ducts.

AUTHOR: None

ORG: Yang-chu Commune Health Center, Hsi-hsia County, Shan-tung

TITLE: "'Fu-sheng [1788 3932] Burn Ointment' in the Treatment of Burns"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 33

ABSTRACT: 'Fu-sheng burn ointment' is made with male hair 15 gm., bean oil 100 gm., and zinc oxide boric acid ointment 150 gm. The burn surface is cleansed or sterilized with mercurochrome, and covered with 'Fu-sheng burn ointment' impregnated gauze and bandaged. Dressings are changed every 2-3 days. The results were good in the treatment of 60 cases of burns. The largest burn area was 47%. No other drugs were used. There was no infection.

AUTHOR: JEN Ch'ao [0117 6389]

ORG: Yangtze River Transportation Hospital, Chung-king

TITLE: "Preliminary Observation of Radix Rubiae in the Treatment of Osteohypertrophy of the Spine"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 37

ABSTRACT: Radix rubiae was used in the treatment of 60 cases of osteohypertrophy of the spine. There were 24 cases with the lesion in the cervical spine and 36 cases in the lumbar spine. The symptoms were relieved in 38 cases, improved in 18 and not relieved in 4 cases. Treatment included ingestion of the drug 1 oz. daily for 30 days or injection of the drug into acupuncture points. The acupuncture procedure was described. Two illustrative cases were reported.

AUTHOR: MENG Kuei-ch'in [1322 2710 3830]

ORG: Wong-sze Hospital, Nan-p'i County, Ho-pei

TITLE: "Use of Bleomycin Eyedrops in the Prevention of Postoperative Recurrence of Pannus"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 45

ABSTRACT: A bleomycin sodium thiosulfate eyedrop was used to prevent postoperative recurrence of pannus. It was used in 24 eyes (2 had 3 recurrences). All cases were operated by the D'ombrain procedure. The eyedrop was begun on the second day, 0.05% 3X daily. When there were prodromal signs of new vessels growing into the cornea, the eyedrop was increased to 0.1% 6X per day. A course lasts 3-6 weeks. Usually the corneal wound healed in 3-5 days, the conjunctival wound healed in 6-15 days, and the eye recovered normal appearance in 3-5 months. Follow-up studies $\frac{1}{2}$ -4 years showed no recurrences.

AUTHOR: MA Chao-jung [7456 5128 1532]
YUAN Chien-chou [5913 1696 3166]
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ORG: Ophthalmology Department, Second People's Hospital, Cheng-chow City

TITLE: "Preliminary Observations of Gyrophora Rellia Injections in the Treatment of Pigmental Changes of the Retina"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 48

ABSTRACT: Gyrophora rellea injections were used to treat 42 cases (83 eyes, 1 eye was blind) of retinal pigmental changes. The injections were given intramuscularly or into acupuncture points daily. Treatment for 6 months constituted one course. Generally 2-3 courses were needed. The interval for each course was 6 months. The visual field, vision and subjective symptoms were recorded before and after treatment. After 1-2 months of treatment in 41 eyes: the visual field was markedly expanded in 14 eyes, expanded in 8 eyes, no

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change in 16 eyes and decreased in 3 eyes; vision was improved in 2 eyes and no change in 39 eyes; subjective symptoms were improved in 2 eyes and no change in 39 eyes. After 3-5 months of treatment in 20 eyes and 6-18 months of treatment in 22 eyes, the percentage of improvement increased in all categories. Follow-up studies of 2 months to 2 years showed: in 32 eyes the visual field was markedly expanded in 12, expanded in 8, no changes in 11 and decreased in 1; in 33 eyes the vision improved in 7, no change in 26; in 33 eyes the subjective symptoms improved in 9, no change in 24.

AUTHOR: HWANG Feng-ch'uan [7806 7364 1556]

ORG: Chinese Herb Medicine Research Section, T'ung-pai County
Prevention of Infectious Disease Station, Ho-nan

TITLE: "Daphne Genkwa in the Treatment of Toothache"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 55

ABSTRACT: Daphne genkwa was used in the treatment of 1,586 cases of toothache with good results. There are the water solution and alcohol solution. One ounce of the drug is soaked in 8 oz. of water or 8 oz. of alcohol for 5 days, and the water or alcohol solutions are ready for use. Cotton is used to clean the surrounding of the sore tooth, then a cotton ball soaked with the solution is placed over the sore tooth. Gentle biting holds the cotton ball in place. The pain usually ceases in 3-5 minutes, the cotton ball is removed in 30 minutes. The drug is anesthetic, during use there is numbness of the face. The numbness ceases after cessation of the drug.

AUTHOR: None

ORG: Bronchitis Research Group, Chang-chun Biological Products Research Institute

TITLE: "Preliminary Discussion of the Structure, Chemical Component and Immunogen Nature of Neisseria Vaccine"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 1, 15 Jan 77 pp 58

ABSTRACT: Experiments were carried out to compare the morphology, chemistry and immuno chemistry of formaldehyde neisseria vaccine and heated neisseria vaccine. Comparison of the micro-structure showed no difference in neisseria bacteria treated or not treated with formaldehyde, but in heated vaccine there was shedding of the cell membrane, congregation of cellular plasma protein and loosening of structure. Comparison of the chemical components showed that heated vaccine contained high nitrogen contents, the reduced saccharide and phosphorus contents were about the same. Comparison of the immunochemistry showed that although heated vaccine contained higher nitrogen contents, the antigen nature was not high, whereas formaldehyde

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vaccine contained lower nitrogen contents but the antigen nature was strong.

Comparison was also made of the formaldehyde vaccine lipo polysaccharide and heated vaccine lipo polysaccharide. The results showed that the structure of lipo polysaccharide in the two vaccines, except for lower methyl ester contents of phosphorus, the total nitrogen and saccharide contents were similar. Immunochemistry analysis showed that the antigen value of heated vaccine was very low, but the heated lipid extracted from heated vaccine had higher antigen value. It supports the idea that both vaccines contain a number of lipo polysaccharides, but there may be a common antigenic lipo polysaccharide.

AUTHOR: None

ORG: Surgery Department, Pai-se Area People's Hospital,
Kwang-si

TITLE: "Acupuncture Anesthesia Thyroidectomy Carried Out
In Basic Units"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 63

ABSTRACT: An operating team went to a thyroid endemic area and performed thyroid surgery on 109 cases under acupuncture anesthesia. The operations included: Enucleation of thyroid cyst 17, excision of nodule 2, subtotal thyroidectomy 76, unilateral total thyroidectomy 1, excision of isthmus 13. Three groups of acupuncture points were separately used, the successful rate of acupuncture anesthesia was 96.3%. A number of modifications were made of the operative procedure to suit the anesthesia. Postoperative complications included: Reflex spasm of the larynx 1, slight injury of the recurrent nerve 1, carpopedal convulsions 1, lowered tone of voice 3, dyspnea 1. All complications recovered after some time.

AUTHOR: None

ORG: None

TITLE: "Introduction of A New Hemostatic Drug --- Squid Ink"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 64

ABSTRACT: Squid ink was prepared from squid, each kg. of squid may be made into 1-2 gm. of dried powder. More than 300 cases of uterine bleeding were treated in four hospitals. They included prolonged menstruation, menorrhagia, menorrhea, and irregular or continuous bleeding. Treatment consisted of 1-2 gm. 2-3X daily for 5 days. In the four hospitals, the markedly effective and effective rate was around 80-90%. In 10 cases of alimentary tract bleeding from peptic ulcers, all stopped bleeding soon after medication (average 5.8 days). The drug was used in 18 cases with hemoptysis in a tuberculosis hospital, the effective rate was 67%. Bleeding was also controlled in 2 cases of bloody urine, 1 case of cervical

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carcinoma bleeding, 1 case of bleeding after treatment of
cervical carcinoma with radium, 1 case of bleeding from
bronchiectasis. No reactions occurred with the use of this
drug.

AUTHOR: CH'AO Hsiu-sen [1560 4423 2773]
TAI Chin-hua [2071 6885 5479]
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HSU Fu-jen [1776 4395 0088]

ORG: Staff Hospital, National Chiang-pei Mechanical Factory,
Chi-lin

TITLE: "Skin Apposition Glue"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 64

ABSTRACT: Resin is made into powder and dissolved in 95%
alcohol and ether. After suture of deep and subcutaneous
tissues, the glue is painted 2-3 mm. from the skin edge,
spreading outwards for 5-7 cm. Approximate the skin edges,
then use gauze strips of equal length to the painted area to
cross over the suture line. The wound usually heals in 3-4
days. The strip of gauze is removed by painting with alcohol
to dissolve the glue.

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LIU Fu-ch'uan [0491 4395 0356]

ORG: LIU of Surgery Department, LIU of Radiology Department,
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TITLE: "Report Case of Sarcoma of the Stomach"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 42

ABSTRACT: A 56-year-old male was admitted because of a mass on the abdomen which gradually increased in size. A medium firm smooth mass 6X4 cm. was palpable at the left upper abdomen. X-ray studies revealed a large crater on the lesser curvature 4.7X7.2 cm. Laparotomy revealed a 10X8X7 cm. mass on the lesser curvature of the stomach, protruding into the hepato-gastric ligament. A subtotal gastrectomy with removal of the mass was performed. Pathological diagnosis was sarcoma of the stomach.

AUTHOR: WONG Hsin-ch'ang [3769 1800 2512]
WONG Yün [3769 0061]

ORG: Infectious Disease Department, Sin-chiang Armed Force
General Hospital

TITLE: "Report Case of Urethritis, Arthritis, Conjunctivitis
Syndrome"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
Journal] No 1, 15 Jan 77 pp 50

ABSTRACT: A 21-year-old male was admitted because of purulent bloody diarrhea and subsequently developed painful and frequent urination, redness of the eyes and multiple joint pains. Examination revealed bilateral conjunctivitis, multiple joint pain and stiffness, redness of the urethral meatus with purulent discharge. He recovered after symptomatic treatment, prednisone, chloroquin and herb medicines were given. Follow-up after six months showed no recurrence. The case was considered possibly non-specific ulcerative colitis existing with Reiter's syndrome.